

FIG. 1

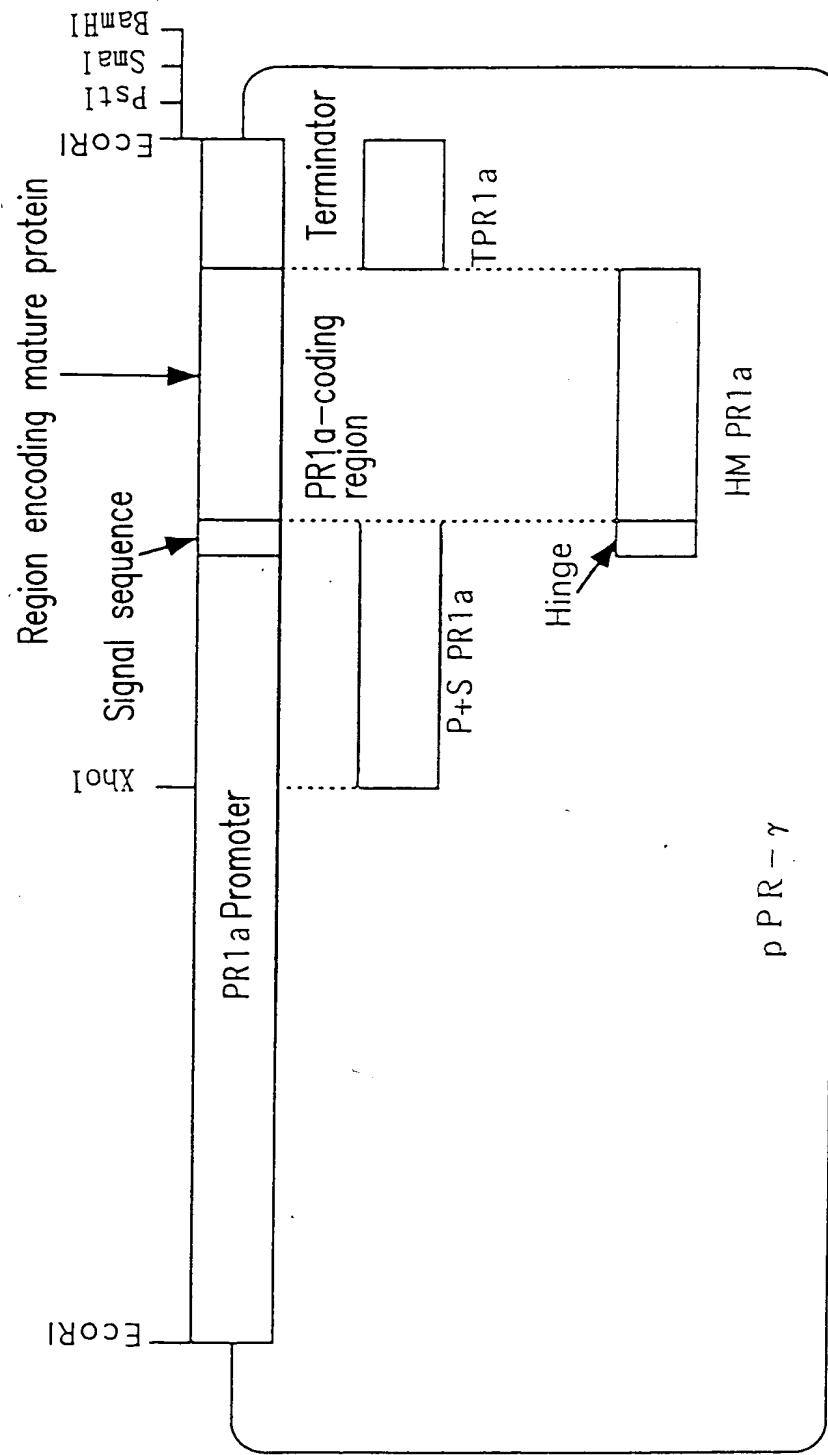
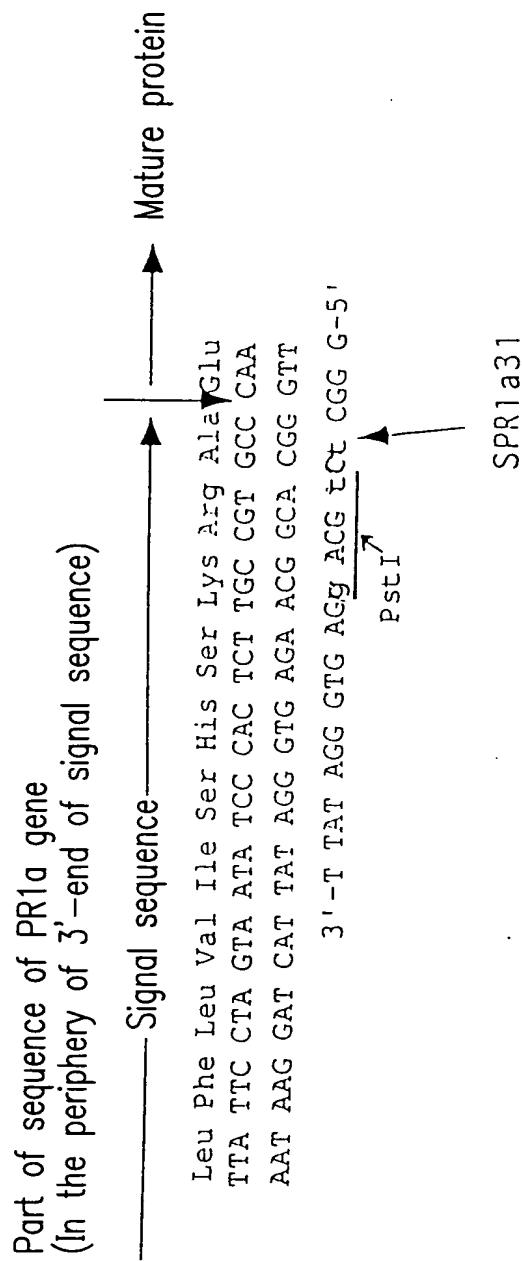


FIG. 2



Bases represented by small letters show a portion  
in which mutation is introduced.

## FIG. 3

Part of Sarcotoxin gene  
(Region encoding C-terminal of mature peptide)

Ala Ala Thr Ala Arg Gly \*\*\*  
5'-GCT GCT ACA GCC AGA GGT TAA TTG AAA-3'

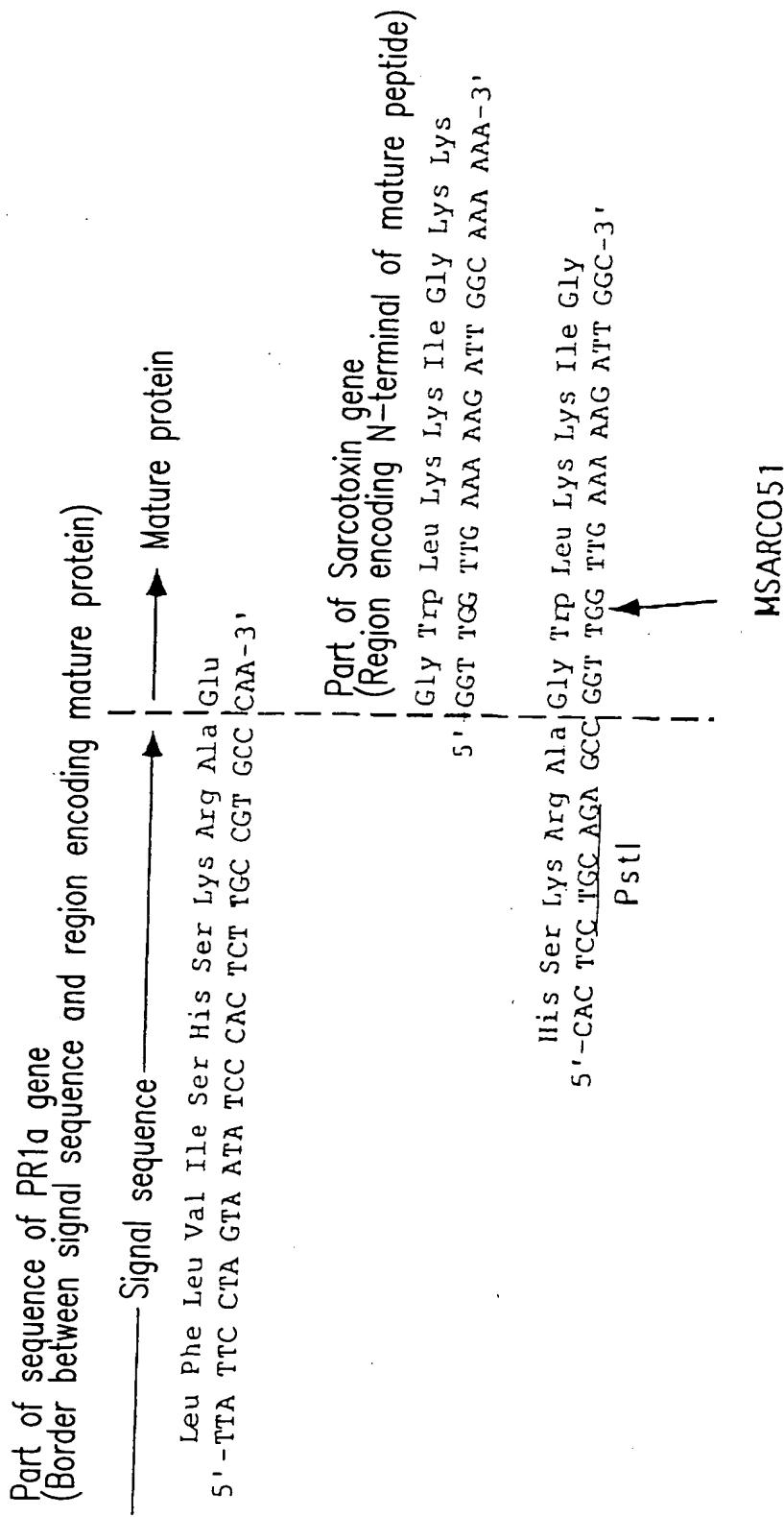
Part of sequence of PR1a gene  
(Region encoding C-terminal of mature protein)  
Pro Tyr \*\*\*  
5'-CCA TAC TAA TTG AAA CGA CCT ACG TCC ATT-3'

5'-GCT GCT ACA GCA CGT GGT TAA TTG AGC TCG AAA CGA CCT ACG TCC-3'

PmaCI SacI

TPR1a51

FIG. 4



09 805813

AR001

FIG. 5

Part of Sarcotoxin gene  
(Region encoding C-terminal of mature peptide)

MSARCO31

FIG. 6

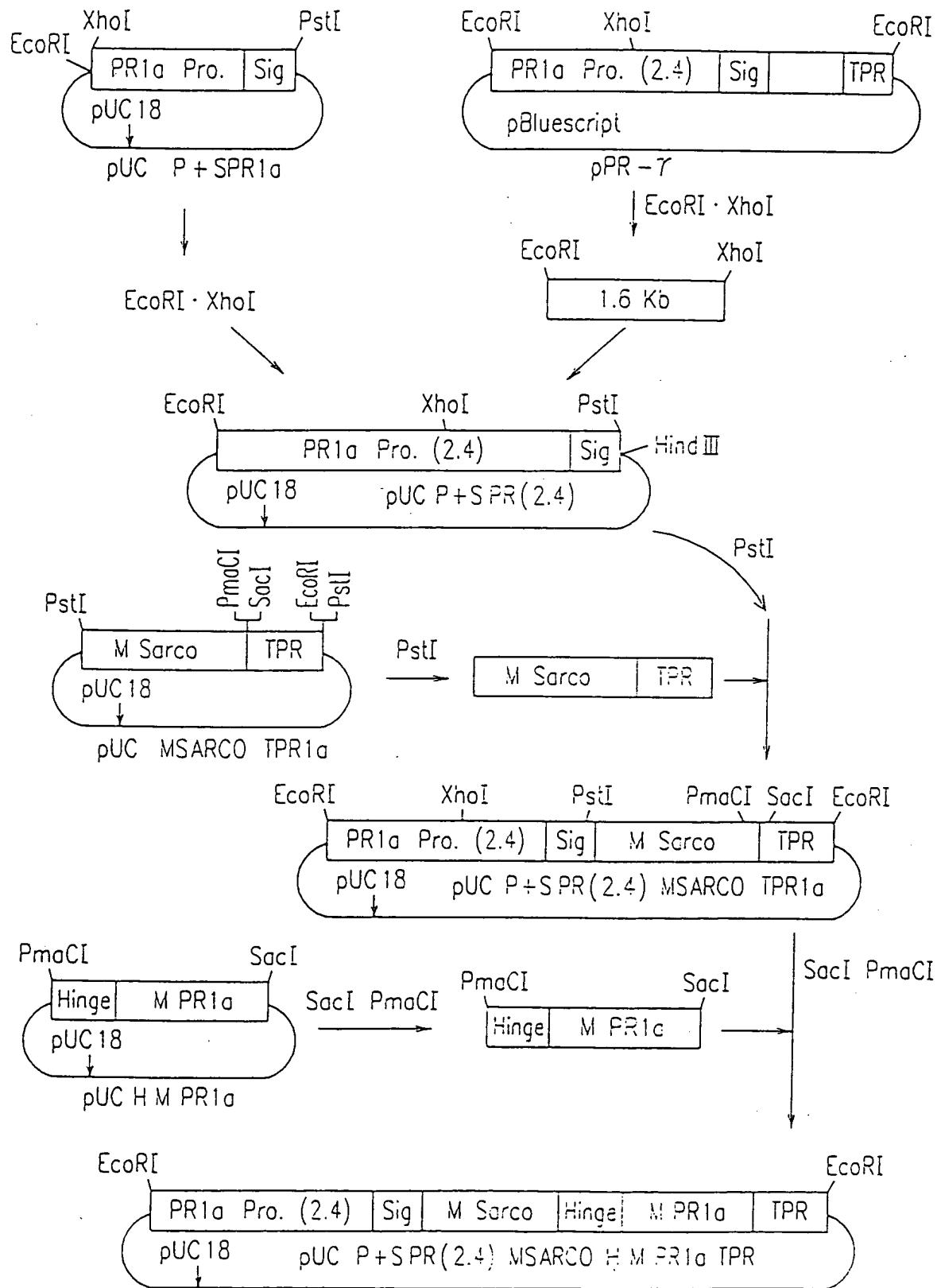
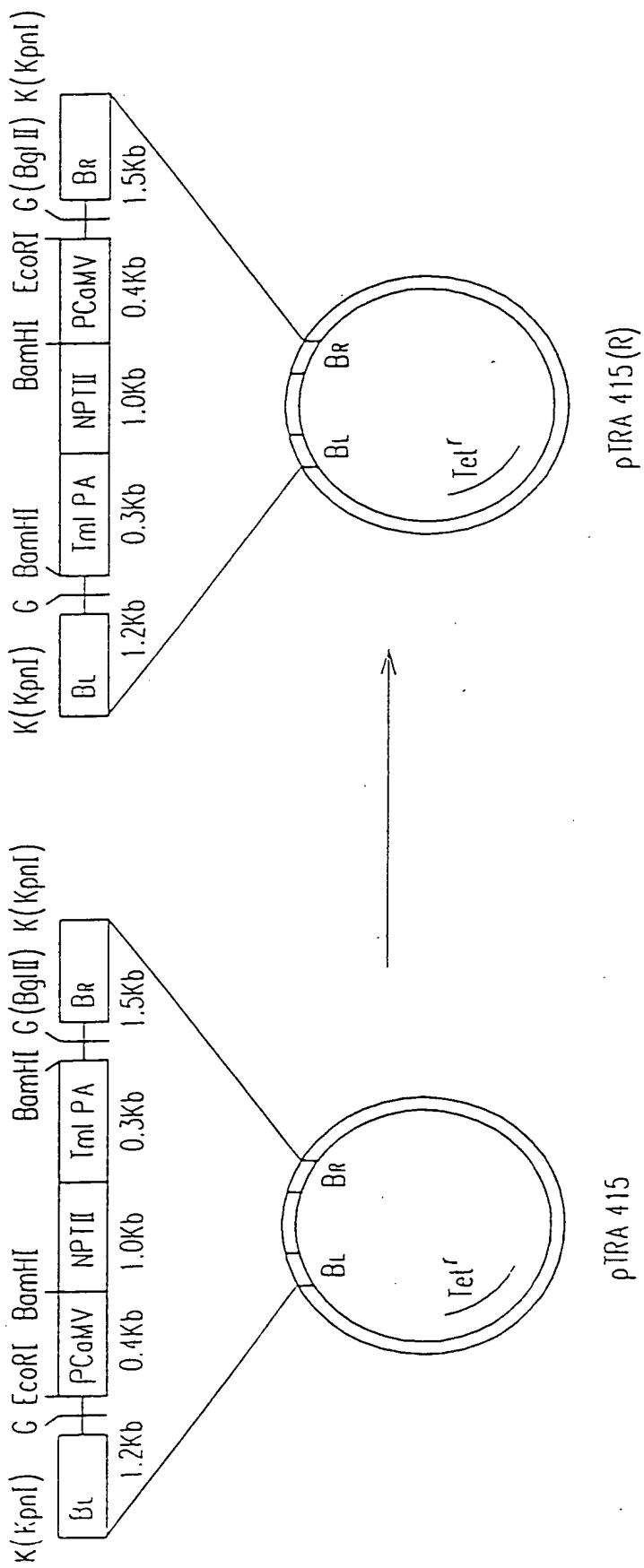


FIG. 7

Direction of binary vector pTRA415 is changed



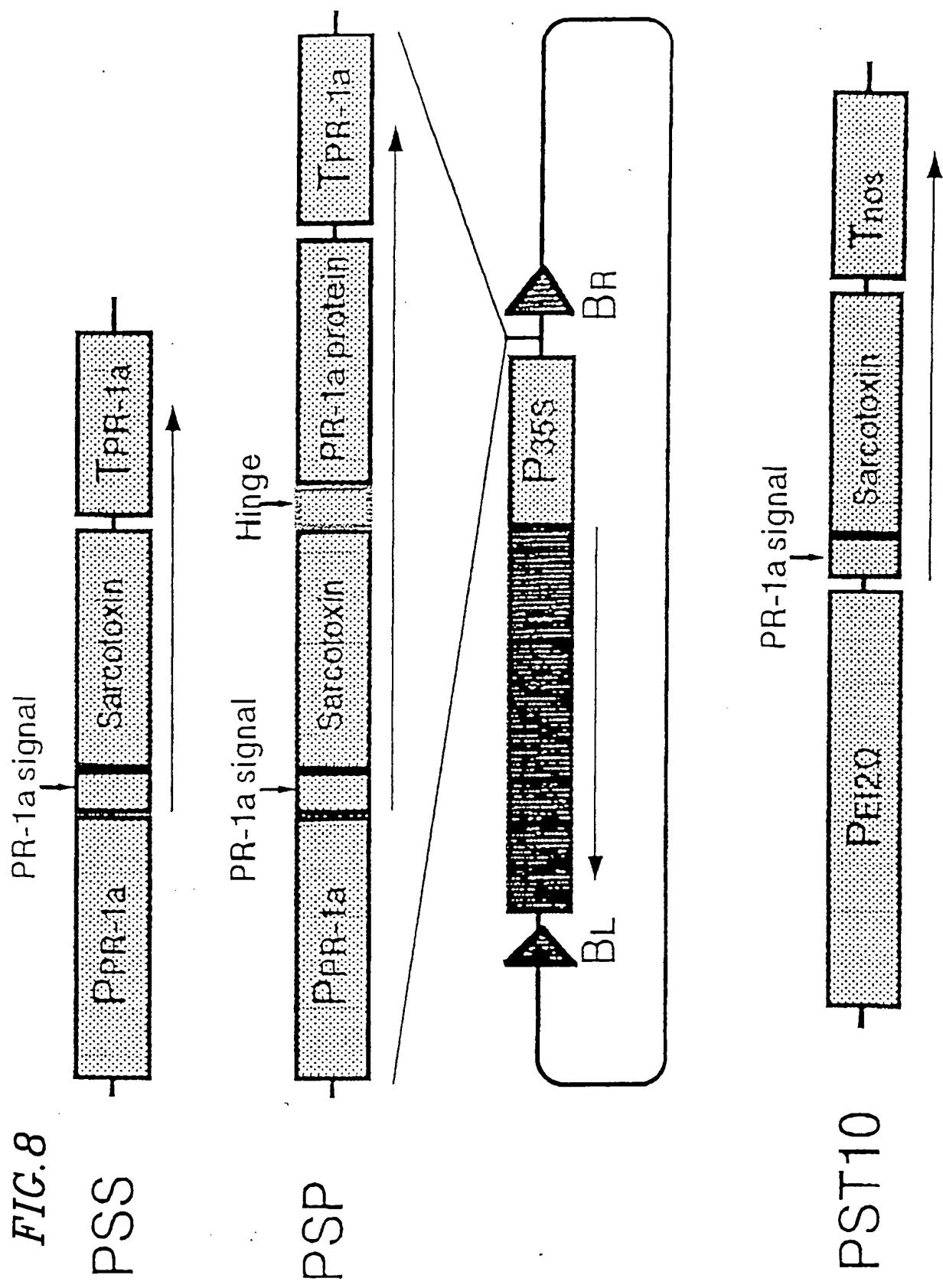


FIG. 9

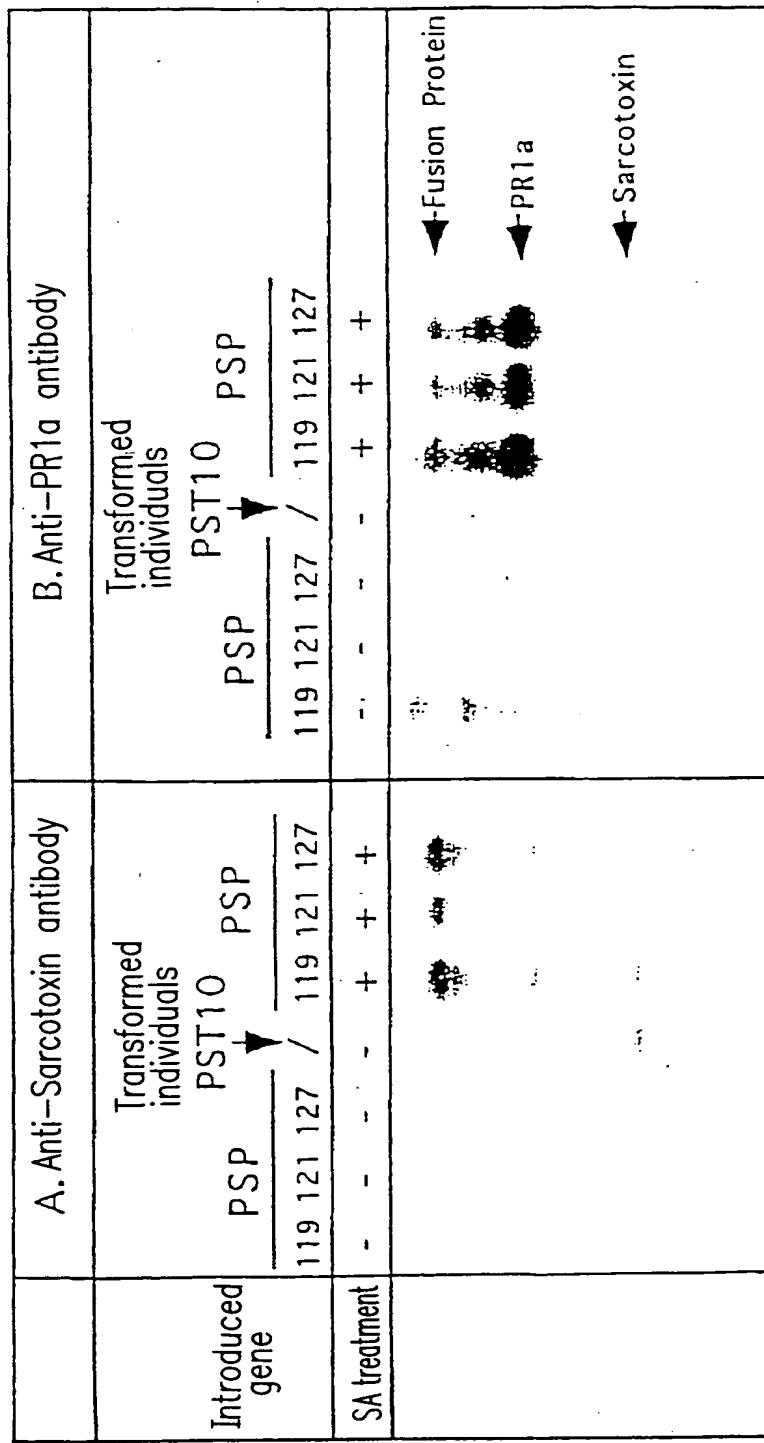


FIG. 10

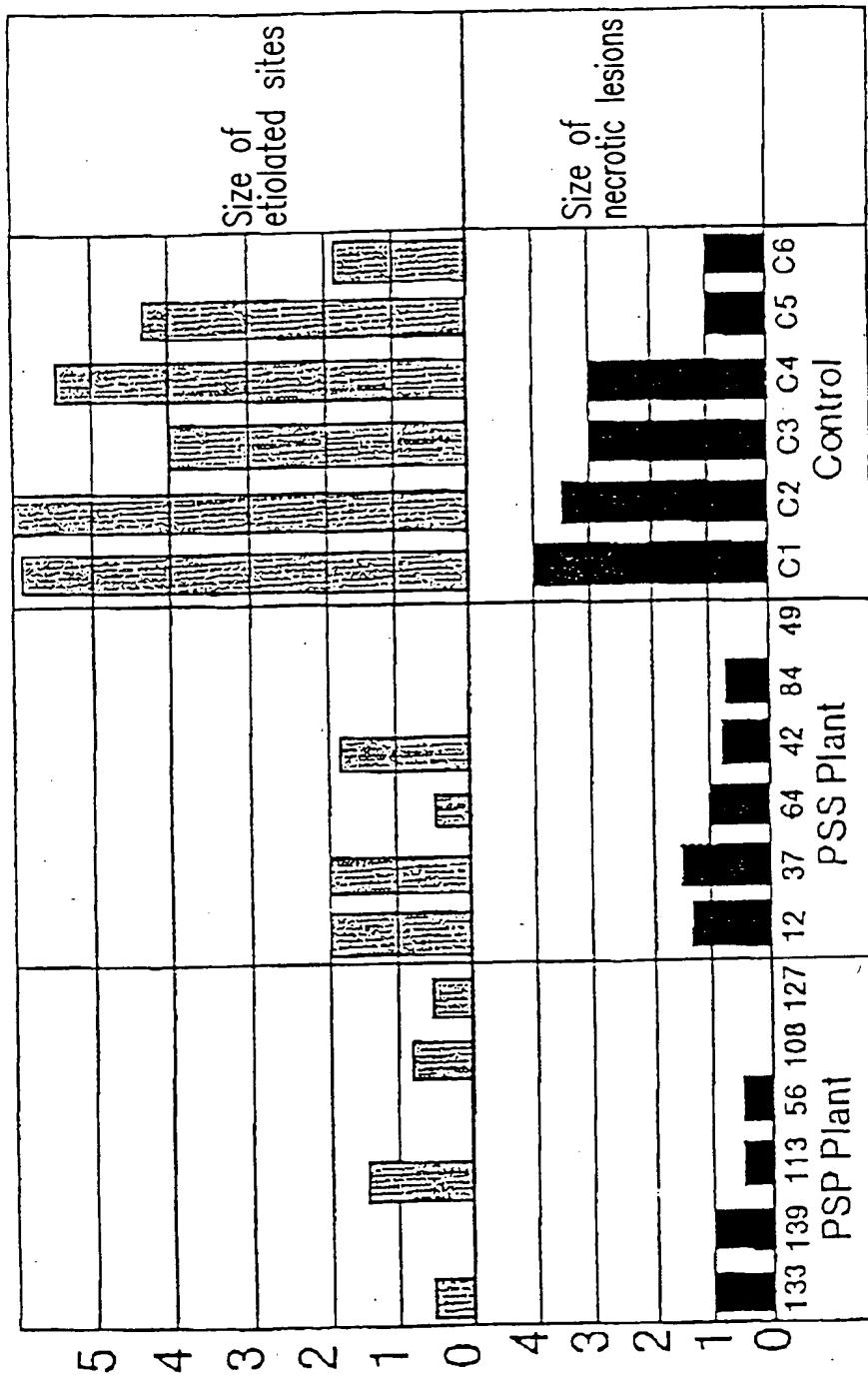


FIG. 11

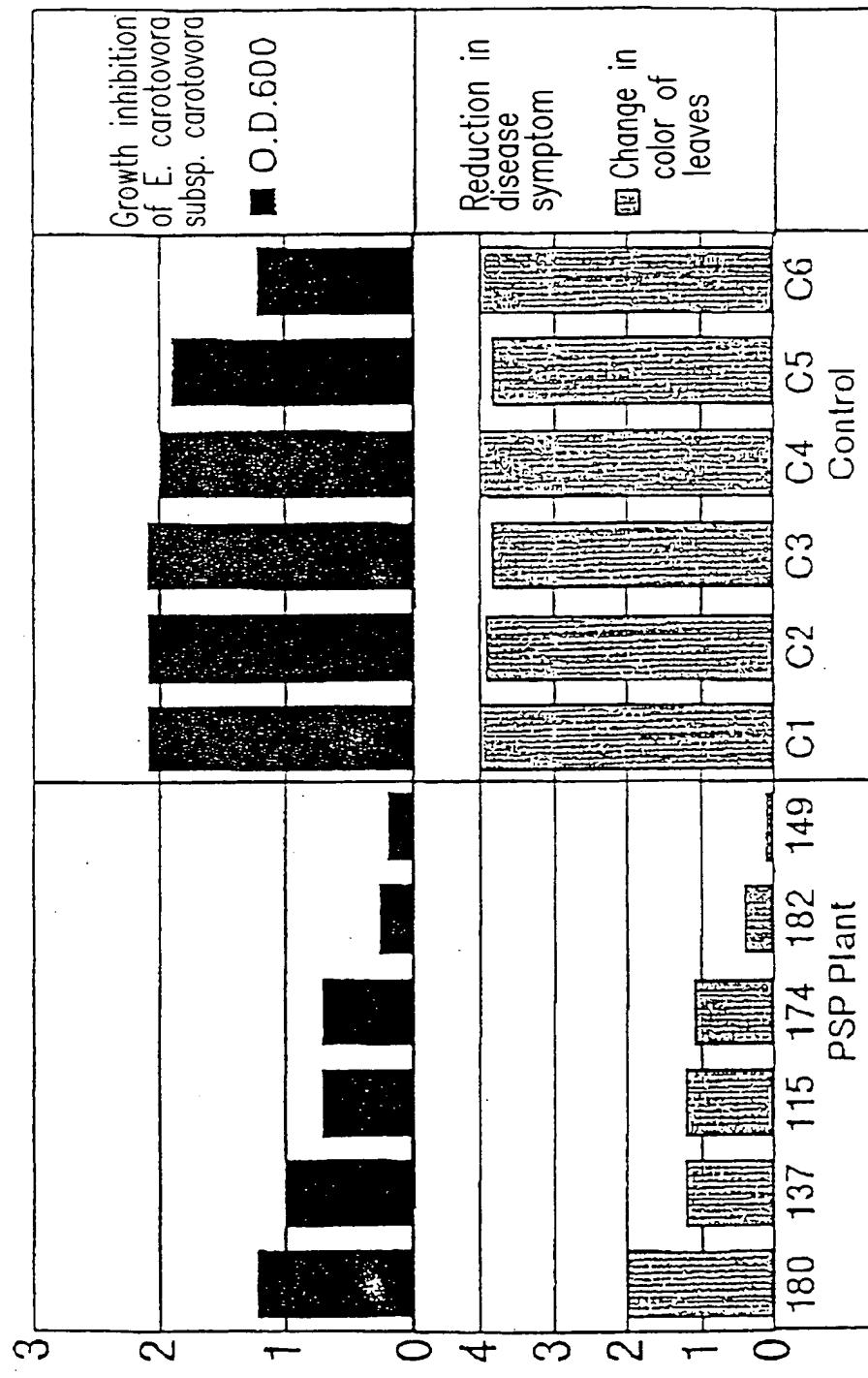


FIG. 12

F.oxy.F-3

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]				48
		12	24	36		
0	0.0707828	0.283131	0.786475	1.3291428	2.2729128	
0	0.0707828	0.1966188	0.786475	1.3291428	2.2729128	
0	0.0707828	0.283131	0.9516348	1.541491	2.548179	
50	0.0707828	0.283131	0.786475	1.7695688	2.548179	
50	0.0707828	0.283131	0.786475	1.541491	2.2729128	
50	0.0707828	0.1966188	0.503344	1.132524	1.7695688	
200	0.0707828	0.283131	0.786475	1.541491	2.2729128	
200	0.0707828	0.1966188	0.503344	0.9516348	1.7695688	
400	0.0707828	0.283131	0.786475	1.3291428	2.013376	
400	0.0707828	0.283131	0.6370448	0.9516348	1.541491	

Standard deviation

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]				48
		12	24	36		
0	0	0.0499479	0.095355	0.1225993	0.158925	
50	0	0.0499479	0.1634658	0.3227743	0.3948334	
200	0	0.0611734	0.2002039	0.4170914	0.355918	
400	0	0	0.1056631	0.2669385	0.3336731	

Average

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]				48
		12	24	36		
0	0.0707828	0.2542936	0.8415283	1.3999255	2.3646682	
50	0.0707828	0.2542936	0.692098	1.4811946	2.1968868	
200	0.0707828	0.2398749	0.6449095	1.2465629	2.0212408	
400	0.0707828	0.283131	0.7117599	1.1403888	1.7774335	

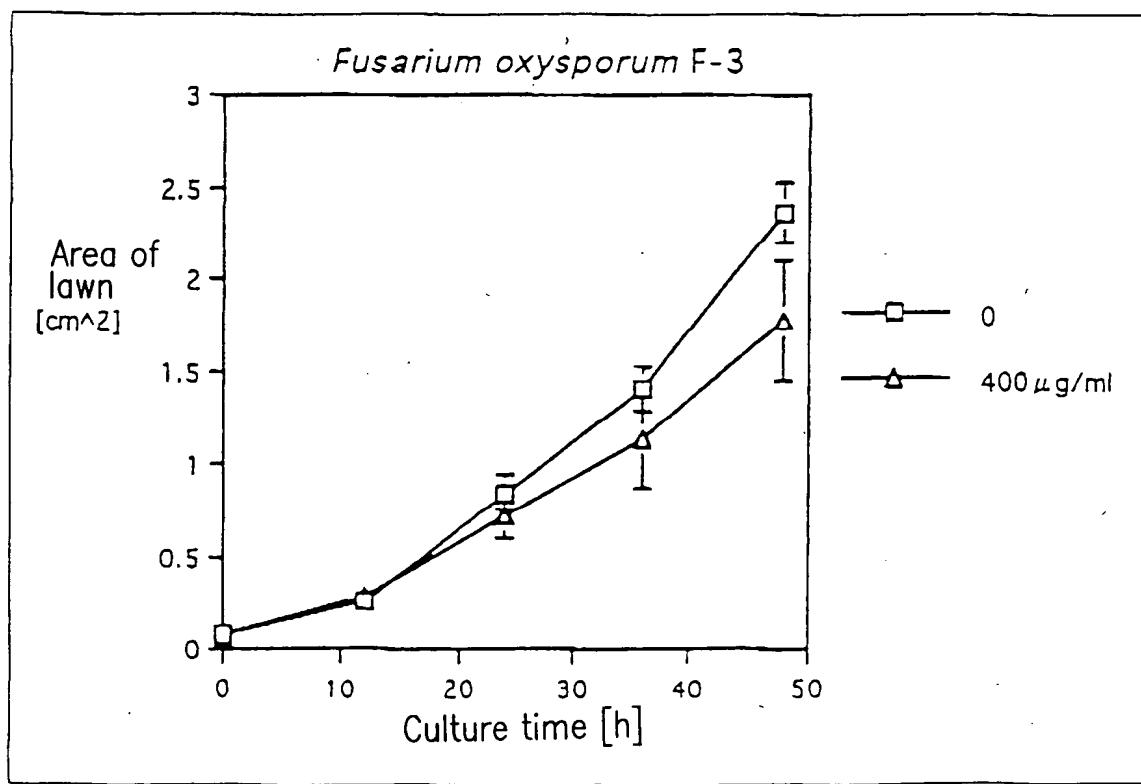


FIG. 13

R.sola.AG-4 1272

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]		
		6	11	13
0	0.07078275	0.38537275	1.541491	2.548179
0	0.07078275	0.38537275	2.013376	2.408579688
0	0.07078275	0.38537275	2.013376	2.548179
50	0.07078275	0.38537275	0.786475	0.709793688
50	0.07078275	0.63704475	1.541491	2.013376
200	0.07078275	0.38537275	0.503344	0.63704475
200	0.07078275	0.38537275	0.786475	0.786475
400	0.07078275	0.38537275	0.503344	0.568228188
400	0.07078275	0.38537275	0.786475	0.709793688

Standard deviation

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]		
		6	11	13
0	0	0	0.272442932	0.080597701
50	0	0.177958978	0.533876934	0.921771893
200	0	0	0.20020385	0.105663143
400	0	0	0.20020385	0.100101925

Average

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]		
		6	11	13
0	0.07078275	0.38537275	1.856081	2.501645896
50	0.07078275	0.51120875	1.163983	1.361584844
200	0.07078275	0.38537275	0.6449095	0.711759875
400	0.07078275	0.38537275	0.6449095	0.639010938

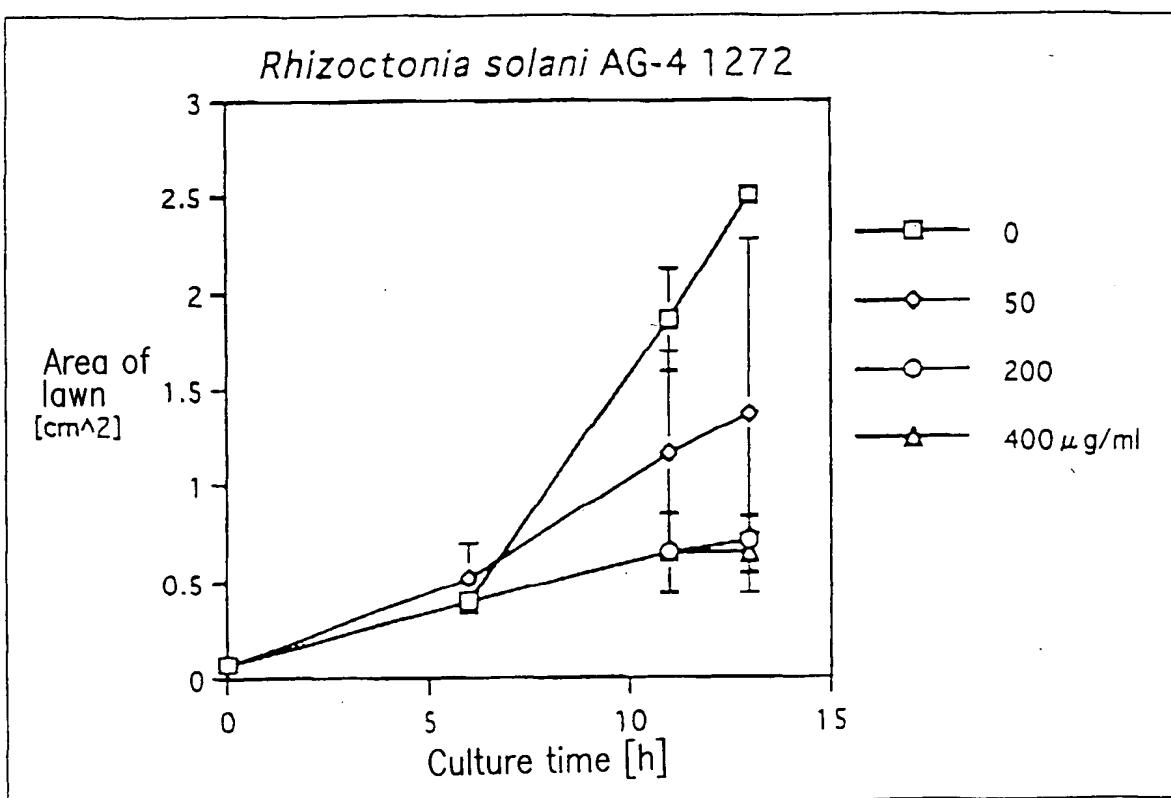


FIG. 14

R.sola. *Rhizoctonia solani*

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]	6	18
0	0.07078275	0.38537275	2.83917475	
0	0.07078275	0.503344	3.46835475	
0	0.07078275	0.283131	2.548179	
50	0.07078275	0.503344	2.013376	
50	0.07078275	0.503344	1.32914275	
200	0.07078275	0.38537275	1.132524	
200	0.07078275	0.63704475	1.32914275	
400	0.07078275	0.283131	0.503344	
400	0.07078275	0.503344	0.63704475	

Standard deviation

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]	6	18
0	0	0.110200088	0.470331339	
50	0	0	0.483825971	
200	0	0.177958978	0.139030451	
400	0	0.155714106	0.094540707	

Average

Added amount of Sarcotoxin $\mu\text{g}/\text{ml}$	0	Culture time [h]	6	18
0	0.07078275	0.390615917	2.951902833	
50	0.07078275	0.503344	1.671259375	
200	0.07078275	0.51120875	1.230833375	
400	0.07078275	0.3932375	0.570194375	

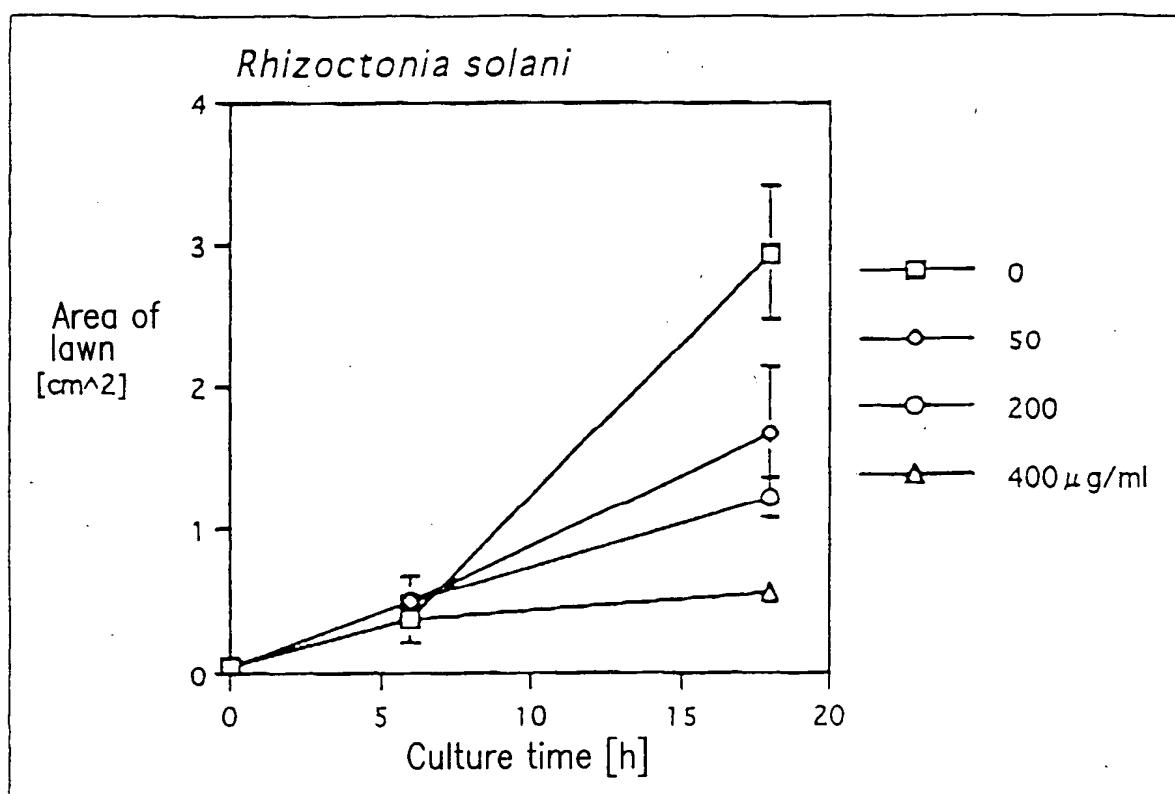


FIG. 15

